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CENTRAL FAX CENTERApplication Number 10/506364
Response to Office Action dated 03/20/2007

JUN 19 2007

REMARKS

The title is amended as suggested by the Examiner. The Abstract is amended to remove the objecting language "comprising." Claims 1, 4, 5, 7, 9, 10, 11, 13, 14, are amended. Claims 21-22 have been added. Applicants have not added new matter; the limitations of original dependent claims 2, 3, and 6 are incorporated into claim 1. New claims 21 and 22 are supported at page 7 lines 26-31 and at page 7 line 3, respectively, of the specification. Claims 2-3, 6, 12 are canceled without prejudice or disclaimer. Claims 1, 4, 5, 7-11, 13-22 are pending.

The rejection of claim 12 under 35 U.S.C. §112 is rendered moot by its cancellation without disclaimer or prejudice.

Claims 1-4, 7, 10, 11, 15, 16 and 18 are rejected as being anticipated by Nishimura '144. Claim 6, which is not rejected under 35 U.S.C. §102(b) is now incorporated into independent claim 1, thus rendering the rejection of claims 1, 4, 5, 7-11, and 13-20 as being anticipated by Nishimura '144 moot. Applicants do not concede the correctness of the rejection.

Applicants traverse the rejection of claims 1-11, 13 and 14 under 35 U.S.C. §103(a) over Terada '931 in view of Tamura '476. The rejection admits that Terada '931 does not disclose the external electrode unit as claimed, but asserts that Tamura '476 provides the external electrode unit. Applicants disagree. Neither Terada '931 and Tamura '476, separately or in combination, teach or suggest a dielectric member interposed between the arc tube and the external electrode unit, nor that the external electrode unit is elastic so as to press the dielectric member against the outer wall surface of the arc tube so as to be held around the arc tube by itself, as required by claim 1. The rejection asserts that the adhesive taught by Tamura '476 is a dielectric but Tamura '476 does not discuss the electrical qualities or the elasticity of the adhesive, nor does it discuss any reason to take the measures necessary to ensure that the adhesive would have these properties.

In the invention of claim 1, a dielectric is inserted between the lamp tube and the outer electrode so that both the glass wall of the arc tube and the dielectric member serve as a dielectric barrier when the arc tube is lit. To improve luminous efficiency and stability, the inner diameter of the arc tube must be kept sufficiently large and the

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thickness of the glass wall is decreased. Decreasing the glass wall thickness, however, decreases the luminous efficiency and creates instability of the gas discharge. The dielectric barrier, however, decreases the capacitance to compensate for the increased capacitance and effects of the thinner glass wall thickness. The elastic external electrode unit having an engaging part that integrally links the electrodes presses the dielectric against the tube wall so that it is easy to position the dielectric against the arc tube wall. Because neither reference recognizes the advantages achieved by the use of a dielectric in achieving lamp efficiency, one of ordinary skill in the art could not combine these references to render the claimed invention obvious. Applicants assert that claims 4, 5, 7-11, 13 and 14 are nonobvious over Terada '931 and Tamura '476 at least by virtue of their dependence upon claim 1. Applicants are not conceding the correctness of the rejection as applied to these claims.

Claims 17 and 19-20 are rejected under 35 U.S.C. §103(a) under Nishimura '144 in view of Yajima '268. Because claims 17 and 19-20 are dependent upon claim 1, the rejection under Nishimura '144 is moot for the same reasons as the rejection of claim 1. Thus, claims 17 and 19-20 are allowable at least by the dependence upon claim 1. Applicants do not concede the correctness of this rejection.


Applicants request the prompt allowance of the pending claims. If a telephone call to the primary attorney-of-record Douglas P. Mueller would be helpful in resolving any outstanding issues, the Examiner is requested to telephone him at the number below.

Respectfully submitted,



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